

What is claimed is:

- 1 1. A cold cathode lamp comprising:
2 electrodes fixed on respective ends of a glass tube; and
3 a rare gas or a rare gas and mercury vapor sealed in said
4 glass tube;
5 wherein at least surfaces of the electrodes are composed
6 a nitride, said nitride is composed at least one of titanium
7 (Ti), zirconium (Zr), hafnium (Hf), niobium (Nb) and tantalum
8 (Ta).
- 1 2. The cold cathode lamp according to claim 1, wherein said
2 electrodes are composed a material, said material is composed
3 at least one of Ti, Zr, Hf, Nb and Ta, and the said nitride is
4 formed by the nitriding treatment of the surfaces of said
5 electrodes.
- 1 3. The cold cathode lamp according to claim 1, wherein said
2 electrodes themselves are composed the nitride, said nitride
3 is composed at least one of Ti, Zr, Hf, Nb and Ta.
- 1 4. The cold cathode lamp according to claim 1, wherein said
2 electrodes are composed by coating the surfaces thereof with
3 the nitride, said nitride is composed at least one of Ti, Zr,
4 Hf, Nb and Ta.

1 5. The cold cathode lamp according to claim 1, wherein a cross
2 section of said glass tube perpendicular to the length direction
3 thereof has a true-round ring shape.

1 6. The cold cathode lamp according to claim 1, wherein a cross
2 section of said glass tube perpendicular to the length direction
3 thereof has a rectangular ring shape.

1 7. The cold cathode lamp according to claim 1, wherein a cold
2 cathode fluorescent lamp is composed by providing a layer of
3 a fluorescent material on an internal surface of said glass
4 tube.

1 8. The cold cathode lamp according to claim 1, wherein said
2 electrodes are bar-shaped.

1 9. The cold cathode lamp according to claim 2, wherein said
2 electrodes are bar-shaped.

1 10. The cold cathode lamp according to claim 3, wherein said
2 electrodes are bar-shaped.

1 11. The cold cathode lamp according to claim 4, wherein said
2 electrodes are bar-shaped.

1 12. The cold cathode lamp according to claim 1, wherein said
2 electrodes are tubular.

1 13. The cold cathode lamp according to claim 2, wherein said
2 electrodes are tubular.

1 14. The cold cathode lamp according to claim 3, wherein said
2 electrodes are tubular.

1 15. The cold cathode lamp according to claim 4, wherein said
2 electrodes are tubular.

1 16. The cold cathode lamp according to claim 1, wherein said
2 electrodes are cup-shaped.

1 17. The cold cathode lamp according to claim 2, wherein said
2 electrodes are cup-shaped.

1 18. The cold cathode lamp according to claim 3, wherein said
2 electrodes are cup-shaped.

1 19. The cold cathode lamp according to claim 4, wherein said
2 electrodes are cup-shaped.

1 20. An electronic instrument composing said cold cathode lamp
2 according to claim 1.

1 21. The electronic instrument according to claim 20, wherein
2 said cold cathode lamp is used for a backlight of a display unit.

1 22. The electronic instrument according to claim 21, wherein
2 said display unit is a liquid-crystal display.

1 23. The electronic instrument according to claim 20, wherein
2 said cold cathode lamp is used for an illumination of a reading
3 unit.

1 24. The electronic instrument according to claim 23, wherein
2 said reading unit is an image scanner.

1 25. The electronic instrument according to claim 24, wherein
2 said reading unit is a pen-type scanner.

1 26. The electronic instrument according to claim 25, wherein
2 said reading unit is digital high scanner.